

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-28. (Canceled)

29. (Currently Amended) A system for positioning an implant in a body, comprising:

a catheter having a proximal end and a distal end, the catheter being insertable within vascular cavity in the body and defining a lumen;

a conductive delivery member having a proximal end and a distal end;

an insulative member having a proximal end and a distal end;

a temporary connection having a proximal end and a distal end, wherein the distal end of the delivery member is joined to the proximal end of the temporary connection, the distal end of the temporary connection is joined to a proximal end of the insulative member, and the distal end of the insulative member is joined to a proximal end of the implant such that the catheter and the insulative member form an insulative chamber that inhibits current that flows through the delivery member when the delivery member is confined to the lumen ~~joined to a distal end of the delivery member, the insulative member being positioned between and connecting the temporary connection and the implant~~; and

an electrical measurement device,

wherein when the catheter is inserted within the vascular cavity, the electrical measurement device is configured to monitor an electrical condition related to a position of the temporary connection while the temporary connection is joined to the delivery member and joined to the implant through the insulative member, the electrical condition changing when the temporary connection, joined to the implant, reaches a predetermined location as the delivery member is advanced through the catheter, the electrical measurement device configured to generate an output signal while the temporary connection is joined to the implant and in response to the changed electrical condition, the output signal indicating that the temporary connection, joined to the implant, has reached the predetermined location.

30. (Original) The system of claim 29, the delivery member comprising a delivery wire.

31. (Original) The system of claim 29, the delivery member comprising a tubular body.
32. (Original) The system of claim 29, the temporary connection comprising an electrolytic connection.
33. (Previously Amended) The system of claim 32, further comprising a power supply configured to provide electrical current through the delivery member and the temporary connection to corrode a portion of the temporary connection.
34. (Previously Amended) The system of claim 33, the corrodible portion of the temporary connection comprising a stainless steel portion of the delivery member that is exposed to blood in a vascular cavity in the body.
35. (Original) The system of claim 33, the electrical monitoring device being included in the power supply.
36. (Previously Amended) The system of claim 33, the electrical monitoring device being separate from the power supply.
37. (Previously Amended) The system of claim 29, the temporary connection comprising a temporary mechanical connection.
38. (Previously Amended) The system of claim 29, the temporary connection comprising a temporary connection that is breakable by application of heat.
39. (Previously Amended) The system of claim 29, the temporary connection comprising a temporary connection that is breakable by application of Radio Frequency (RF) radiation.
40. (Previously Amended) The system of claim 29, the temporary connection comprising a temporary connection that is hydraulically breakable.

41. (Original) The system of claim 29, the electrical condition comprising a current.
42. (Original) The system of claim 29, the electrical condition comprising a voltage.
43. (Original) The system of claim 29, the electrical condition comprising an impedance.
44. (Original) The system of claim 29, the implant comprising a vaso-occlusive implant.
45. (Original) The system of claim 44, the implant comprising a coil.
46. (Original) The system of claim 45, the coil comprising a Guglielmi Detachable Coil (GDC).
47. (Original) The system of claim 45, the coil including platinum.
48. (Original) The system of claim 45, the coil having a bio-reactive material coating.
49. (Original) The system of claim 45, the coil comprising a bio-reactive coil.
50. (Original) The system of claim 45, the coil comprising a non-bio-reactive polymer coil.
51. (Original) The system of claim 29, the implant comprising a stent.
52. (Original) The system of claim 29, the implant comprising a filter.
53. (Canceled).
54. (Previously Amended) The system of claim 29, further comprising a visual indicator, the electrical measurement device being configured to provide the output signal to the visual indicator so that the visual indicator can be illuminated after the electrical condition has changed while the implant is joined to the temporary connection.

55. (Previously Amended) The system of claim 29, further comprising an audio indicator, the electrical measurement device being configured to provide the output signal to the audio indicator so that the audio indicator can be activated after the electrical condition has changed while the implant is joined to the temporary connection.

56. (Canceled).

57. (Previously Amended) The system of claim 29, further comprising a controller, the electrical measurement device being configured to provide the output signal to the controller while the implant is joined to the temporary connection, the controller being configured to automatically break the temporary connection in response to the output signal after the electrical condition has changed.

58. (Canceled)

59. (Previously Amended) The system of claim 29, the predetermined location comprising a distal end of the catheter.

60. (Original) The system of claim 59, the electrical condition changing when the temporary connection reaches the distal end of the catheter.

61. (Previously Amended) The system of claim 59, the electrical condition changing when the temporary connection, while joined to the implant, extends beyond the distal end of the catheter.

62. (Previously Amended) The system of claim 29, the electrical measurement device being configured to compare a reference current with a second current that is generated when the temporary connection, while joined to the implant, reaches the predetermined location, the second current being larger than the reference current.

63. (Previously Amended) The system of claim 29, the electrical measurement device including a comparison circuit, the comparison circuit being configured to compare a threshold current to a current measured by the electrical measurement device, the comparison circuit being further configured to generate the output signal when the temporary connection, while joined to the implant, has reached the predetermined location and the measured current is larger than the threshold current.

64. (Previously Amended) The system of claim 29, further comprising a conductive wire connected between the electrical measurement device and the distal end of the catheter, the electrical measurement device being configured to detect an electrical condition related to a position of the temporary connection, while joined to the implant, in the catheter through the conductive wire.

65. (Previously Amended) The system of claim 64, the conductive wire being positioned through the catheter.

66. (Previously Amended) The system of claim 29, the electrical measurement device comprising a volt/current meter.

67. (Currently Amended) A system for positioning an implant in a body, comprising:
a catheter having a proximal end and a distal end, the catheter being insertable within vascular cavity in the body and defining a lumen;
a conductive delivery member having a proximal end and a distal end;
an insulative member having a proximal end and a distal end;
a temporary connection having a proximal end and a distal end, wherein the distal end of the delivery member is joined to the proximal end of the temporary connection, the distal end of the temporary connection is joined to the proximal end of the insulative member, and the distal end of the insulative member is joined to a proximal end of the implant such that the catheter and the insulative member form an insulative chamber that inhibits current that flow through the delivery member when the delivery member is confined to the lumen~~joined to a distal end of the delivery member, the insulative member being positioned between and connecting the temporary connection and the implant~~;

a power supply for providing an electrical current that conducts through the delivery member and the temporary connection; and

a current measurement device, wherein when the catheter is inserted into the vascular cavity, the current measurement device is configured to

monitor the electrical current as the delivery member is pushed through the catheter, the electrical current being related to a relative position of the temporary connection before the temporary connection is broken, the electrical current increasing from a first current level while the temporary connection is joined to the implant, to a second, higher current level when the temporary connection, joined to the implant through the insulative member, reaches a predetermined location relative to the catheter, and

generate an output signal in response to detecting the second current level, the output signal indicating that the temporary connection, joined to the implant, is at the predetermined location.

68. (Previously Presented) The system of claim 67, the power supply capable of supplying sufficient electrical current so that the temporary connection can be broken electrolytically after the output signal is generated.

69. (Previously Amended) The system of claim 67, further comprising a visual indicator, the current measurement device being configured to provide the output signal to the visual indicator so that the visual indicator is illuminated after the electrical current has increased to the second current level while the temporary connection is joined to the implant.

70. (Previously Amended) The system of claim 67, further comprising an audio indicator, the current measurement device being configured to provide the output signal to the audio indicator so that the audio indicator can be activated after the electrical current has increased to the second current level while the temporary connection is joined to the implant.

71. (Previously Amended) The system of claim 67, further comprising a controller, the current measurement device configured to provide the output signal to the controller while the temporary connection is joined to the implant, the controller configured to automatically break

the temporary connection in response to the output signal after the electrical current has increased to the second current level.

72. (Previously Presented) The system of claim 29, wherein the output signal is provided to a user, while the temporary connection is joined to the implant, to allow the user to manually initiate breaking of the temporary connection and to release the implant.

73. (Previously Presented) The system of claim 67, wherein the output signal is provided to a user, while the temporary connection is joined to the implant, to allow the user to manually initiate breaking of the temporary connection and to release the implant.

74. (Previously Presented) The system of claim 29, wherein the catheter and the insulative member form an insulative chamber that prevents or minimizes the amount of current that flows through the delivery member when the delivery member is within the catheter.

75. (Previously Presented) The system of claim 67, wherein the catheter and the insulative member form an insulative chamber that prevents or minimizes the amount of current that flows through the delivery member when the delivery member is within the catheter.

76. (Previously Presented) The system of claim 29, wherein the temporary connection is insulated from the implant so that electrical current passes to the temporary connection but not the implant.

77. (Previously Presented) The system of claim 67, wherein the temporary connection is insulated from the implant so that the electrical current passes to the temporary connection but not the implant.

78. (Previously Presented) The system of claim 29, the temporary connection having a proximal end and a distal end, the implant having a proximal end and a distal end, wherein the insulative member extends between the distal end of the temporary connection and the proximal end of the implant.

79. (Previously Presented) The system of claim 67, the temporary connection having a proximal end and a distal end, the implant having a proximal end and a distal end, wherein the insulative member extends between the distal end of the temporary connection and the proximal end of the implant.

80. (New) The system of claim 29, wherein the delivery member, the insulative member and the temporary connection are linearly and coaxially arranged within the lumen of the catheter.

81. (New) The system of claim 67, wherein the delivery member, the insulative member and the temporary connection are linearly and coaxially arranged within the lumen of the catheter.

82. (New) The system of claim 29, wherein the insulative chamber defined by the catheter and the insulative member prevents or minimizes the amount of current that flows through the delivery member when the delivery member is confined to the catheter lumen.

83. (New) The system of claim 67, wherein the insulative chamber defined by the catheter and the insulative member prevents or minimizes the amount of current that flows through the delivery member when the delivery member is confined to the catheter lumen.